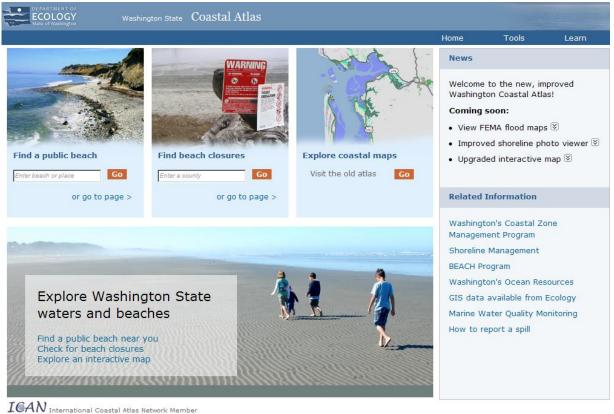
# Washington Coastal Atlas





# Washington Coastal Atlas

### **Purpose**

 To make relevant information easily available for use in coastal and shoreline resource planning and management.



### **Examples**

- Provide information to update local Shoreline Master Programs
- View current or historic aerial photos of project sites
- Gather information prior to field work or site visits
- Quickly prepare maps to inform a variety of audiences on specific topics
- View changes over time in the marine shoreline or in upland land cover

# **Target Audience**

### **Primary Targets**

- Local governments implementing WA CZM through local Shoreline Master Programs
- State government agencies with authority to regulate or manage activities on the shorelines and tidelands of Washington

### Other important users

- Tribal governments
- Federal agencies
- Non-governmental organizations
- Outdoor recreation groups
- Real estate professionals
- Private citizens



# "Old" Washington Coastal Atlas



## Data Available

### Biological/Habitat Features

- Wetlands
- Historic Estuary Maps
- Pocket Estuaries
- Dunegrass, Surfgrass
- Kelp, Eelgrass
- Salt Marsh
- Low Marsh

### Physical Features

- Drift Cells
- Slope Stability
- Water Bodies (100k)
- Water Courses (100k)

### Regulated Features

- Commercial Shellfish
- Flood Zone
- Drinking Water Wells
- Category Water (5, 4C, 4B, 4A, 2, 1)

### Modifications

- Piers and Docks
- Shore Modification

### Jurisdictional Delineations

- Watershed (WRIA) Boundaries
- Sub Basins
- Counties
- Cities
- Township/Range/Section

### Transportation Features

- Major Roads
- Streets
- Railroads

### Background Imagery

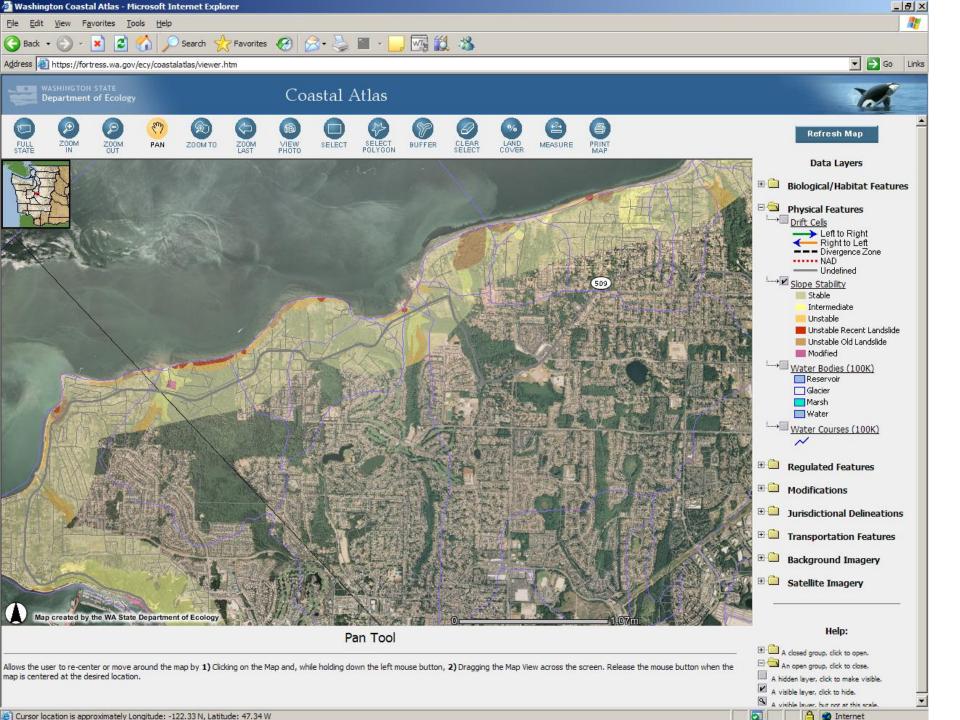
- USGS Topo Maps
- Aerial Imagery
- Hillshade
- Nautical Charts

### Satellite Imagery

• Land Use/Land Cover 1991, 1996, 2001, 2006

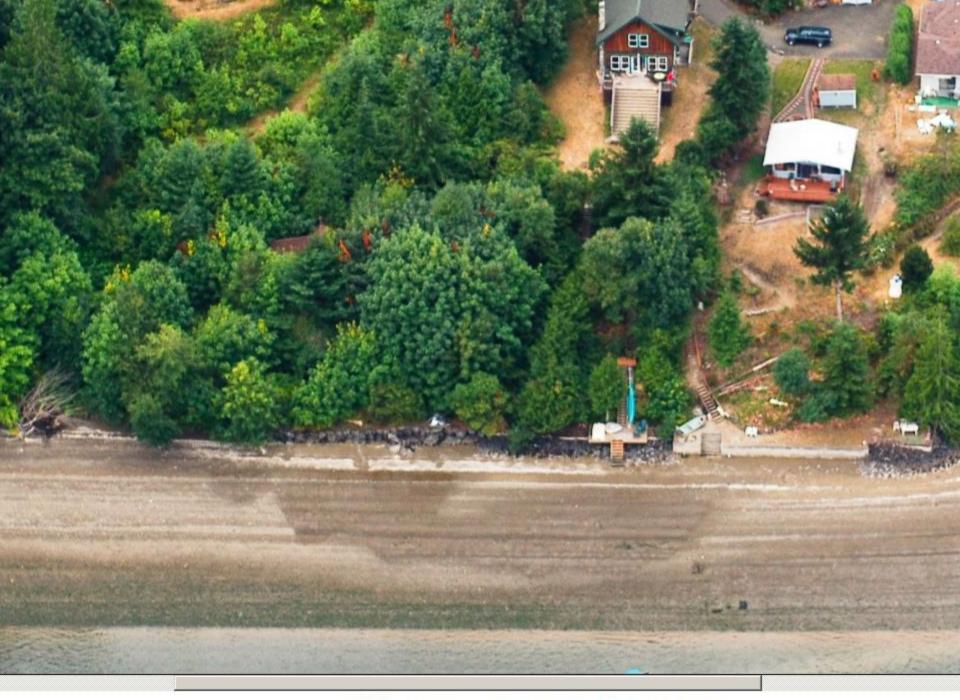
### Other Imagery

 Oblique shoreline photos 1976-77, 1992-'97, 2000-02, 2006-7



# Oblique Aerial Photos of Shoreline

- Downloadable
- High Resolution
- Available for Multiple Years
- Available for all WA Marine Shorelines And Some Freshwater Shorelines in Eastern And Western Washington



### Coastal Atlas





Photo Reference: PIE0677\_063 Date: on photo Area: Ruston ASARCO Plant

Download links for this photo:

Low Resolution (700 x 702 pixels, 618Kb)

High Resolution (2092 x 2118 pixels, 1131Kb)

### Coastal Atlas



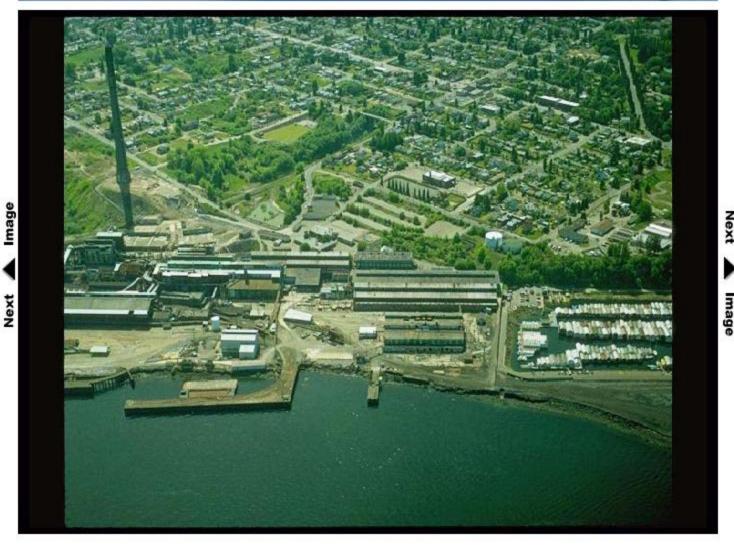


Photo Reference: PIE0102 Date: 5/16/1992 Area: Asarco Smelter

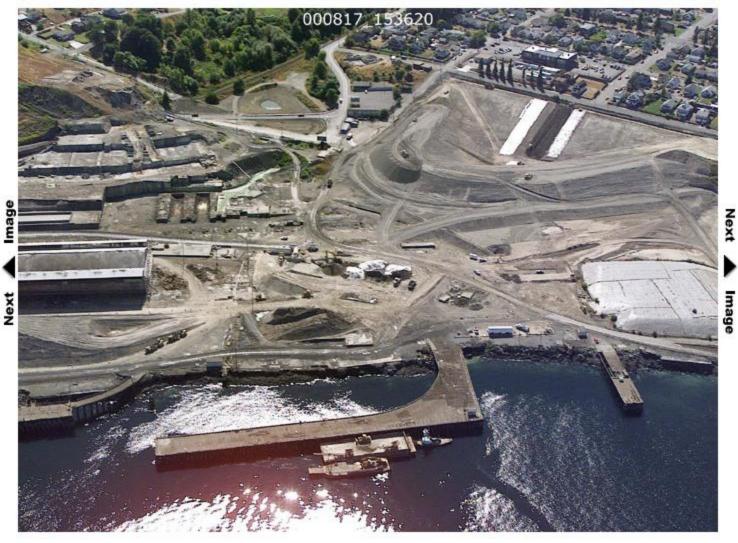
Download links for this photo:

Low Resolution (768 x 512 pixels, 92Kb)



### Coastal Atlas





Download links for this photo:

Low Resolution (700 x 524 pixels, 185Kb)

High Resolution (2008 x 1504 pixels, 718Kb)

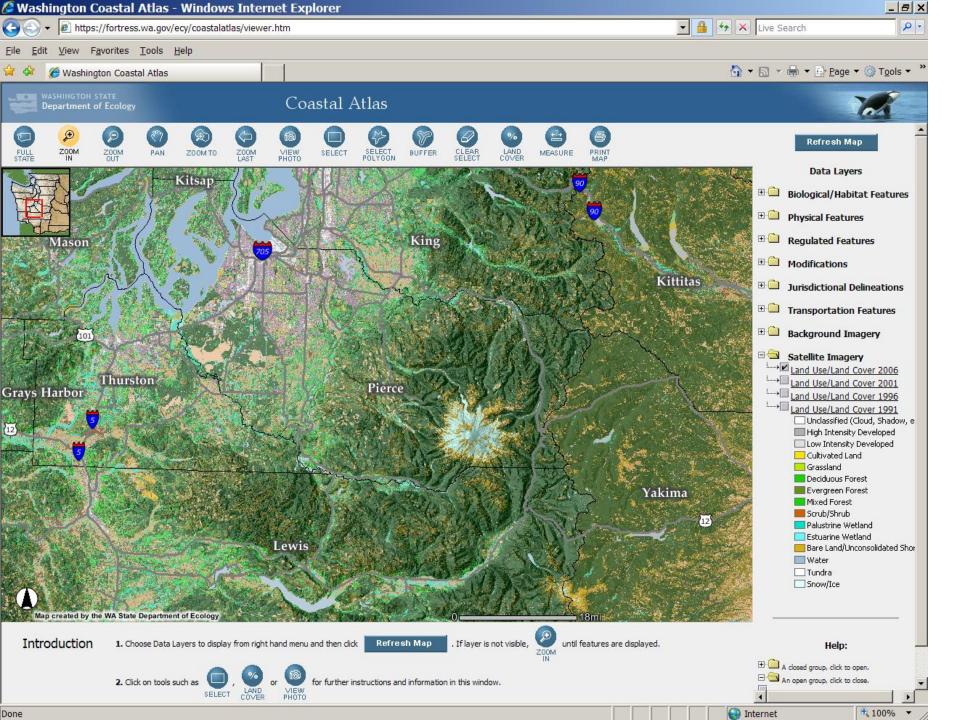


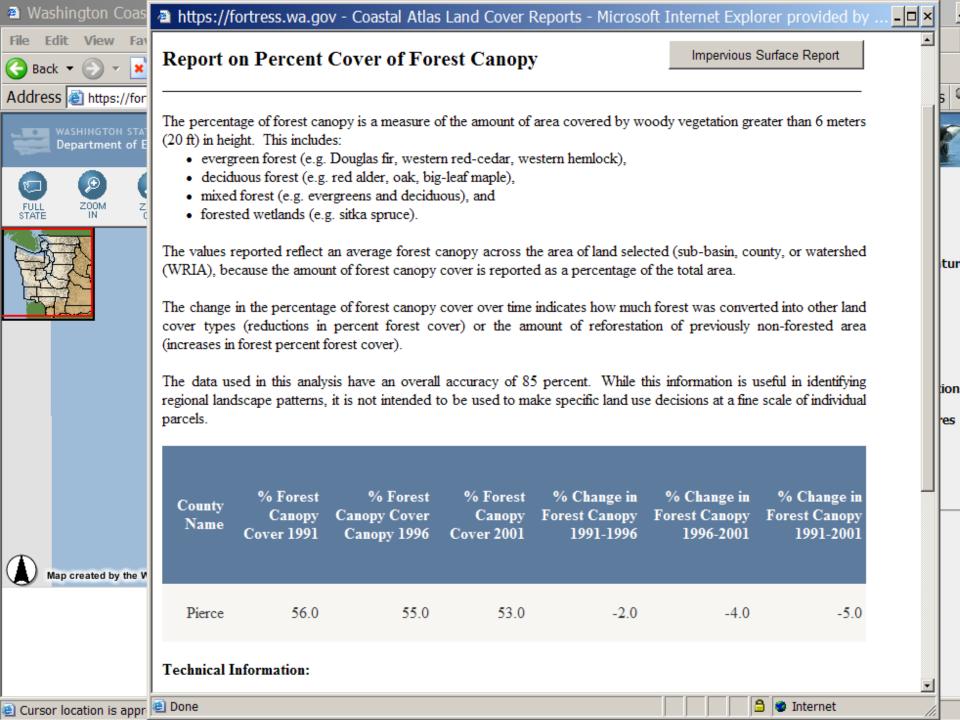
Photo Reference: 060727\_10050 Date: 7/27/2006

Download links for this photo:

# **Land Cover Information**

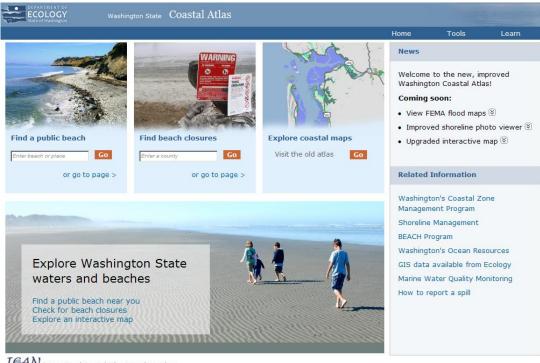
- NOAA Coastal Change Analysis Program Data
- Change in Forest Cover
- Change in Impervious Surface Cover





# "New" Washington Coastal Atlas

All that was in the "old" Atlas, plus much more...



ICAN International Coastal Atlas Network Member

# Actively incorporating what we know about Coastal Atlas users

 current knowledge of target user groups

 professional design expertise (Tammy) Coastal Atlas personas

#### Pat the Shoreline Planner



Job Title: Associate Planner, City of Bainbridge Island, Puget Sound

#### Job Duties:

- Functions as a member of the long range planning and natural resources team and
  works closely with the Director, Planning Manager, other City staff, and community
  organizations to guide and help coordinate shoreline and natural resources planning, complex
  shoreline projects, and other day- to-day planning activities.
- Coordinates shoreline restoration and conservation efforts, including management of shoreline restoration projects.
- Facilitates and performs planning department policy and code development functions.
- Prepares reports and presents findings and recommendations.
- Coordinates and performs technical planning functions, including: meeting with
  development professionals on land use applications; environmental policy review, regulation
  and code interpretation; policy, regulation and ordinance development; and review and
  analyze land use, building applications; and other duties as assigned.

#### Technical Knowledge and Skills:

- Professional understanding of marine shoreline ecological functions and processes
  and the ability to work effectively with scientists and consultants to develop a shoreline
  inventory and analysis report which is intended to characterize current shoreline conditions;
  evaluate existing functions and values of the shoreline resources; analyze cumulative
  impacts, and write an ecosystem-based management program;
- Facilitate the public and decision makers in understanding shoreline processes and functions, legal requirements, and management challenges;
   Technical knowledge in planning theory as well as knowledge and understanding of the legal
- Technical knowledge in planning theory as well as knowledge and understanding of the legal
  administrative rules, including the relationship between the Shoreline Management Act
  (SMA) and the Growth Management Act (GMA), and Critical Areas Ordinances;
- Moderate to advanced abilities with ArcGIS, Microsoft Excel, and Microsoft Word software.

#### Educational level:

Bachelor's degrees in planning, natural resources and environmental studies and work experience with a local government in Washington State.

# **Technology**

# Past

Current

•ESRI ArcIMS 9.2 ArcSDE 9.3: Data, simplified metadata



- MS SQL Server 2005
- •IIS Server,
  Apache Tomcat 5.5
- ASP.NET v2.0 (Coastal Image Viewer & Land Cover Tool)

- •ESRI ArcGIS Server 10.0
- **•ASP.NET 4.0**
- ESRI Javascript API

# 2011 Coastal Atlas Update

Update user interface

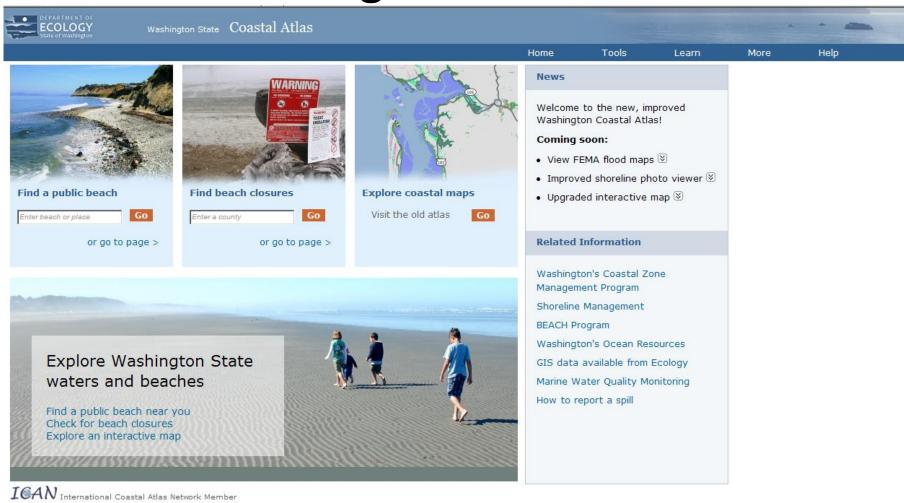
Improved photo viewer

- Add beach water quality
   & beach closure info
- Add FEMA flood maps

Add shoreline public access information

Update map tools on main map

# "New" Washington Coastal Atlas





Go Enter beach or place

or go to page >



#### Find beach closures

Enter a county

Go

or go to page >



Visit the old atlas

Go

#### News

Home

Welcome to the new. Washington Coastal A

#### Coming soon:

- View FEMA flood m
- Improved shoreline
- Upgraded interactive

#### Related Information

Washington's Coastal Management Program

Shoreline Managemer

BEACH Program

Washington's Ocean

GIS data available fro

Marine Water Quality

How to report a spill

#### PUGET SOUND

Tools

### Exploring

Tour

Learn

Beaches

Bluffs & Spits

More

Help

Species

#### Living

Buying Property

Building

Homeowner Tips

Laws & Permits

#### OUTER COAST

#### Sights

Beaches

Animals

Plants

Hazards

Erosion

Waves

Storms

# **Explore Washington State** waters and beaches

Find a public beach near you Check for beach closures Explore an interactive map



IGAN International Coastal Atlas Network Member

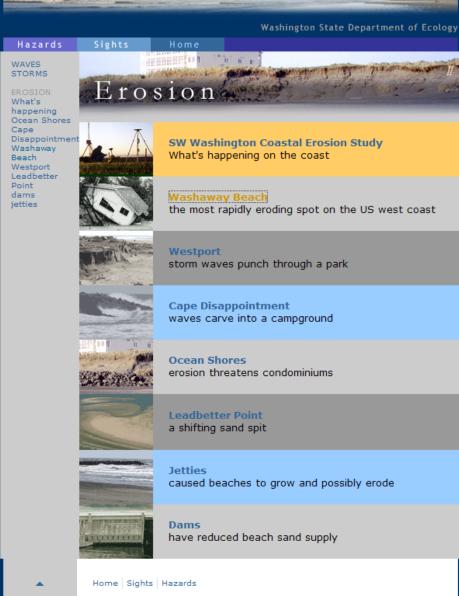
Ecology Home | Atlas Home | Data Disclaimer | Privacy Policy

Coastal Atlas Version 5.0

Copyright @ Washington State Department of Ecology 2010. All Rights Reserved.







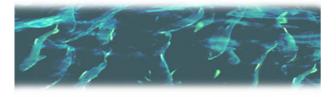
Geoduck Harbor Seal

# Department of Ecology Puget Sound Shorelines

### Sound Species

Over 211 species of fish frequent the Sound. Many species use shoreline areas for breeding, migration and development.

Salmon
 Surf Smelt
 Sand Lance



Plants and seaweed provide food and shelter.







Eelgrass

■ Bull Kelp

Native Plants





Madrone

Maple

Many birds use the shoreline as a migratory path. Others live along the Sound year round.

- Bald Eagle
- Scoter
- Shorebird
- Great Blue Heron



# 2011 Coastal Atlas Update

Update user interface

Improved photo viewer

- Add beach water quality
   & beach closure info
- Add FEMA flood maps

Add shoreline public access information

Update map tools on main map

# Ecology EAP & DOH BEACH Program





Home

Tools

Learn

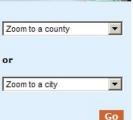
More

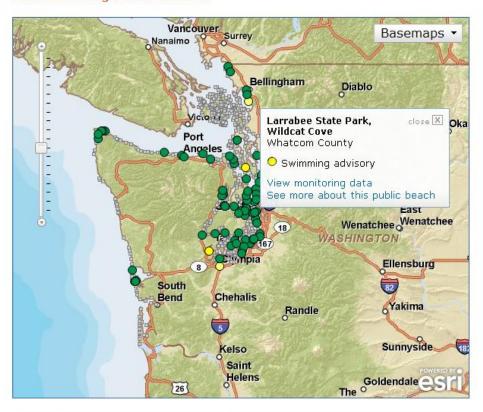
Help

Beach Closures

Home > Beach closures

### Find swimming beach closures





CLOSED

Beach closed for swimming.

Closed by the local health department or the Public Health Officer. Often due to sewage spills.

CAUTION

Swimming advisory.

Children, elderly, and those in ill health are advised not to swim. Increased levels of bacteria are present.

OPEN

Beach open and monitored.

Bathing after swimming is recommended. Harmful bacteria may still be present.

Beach not monitored.

Washington State's Beach Environmental Assessment, Communication and Health (BEACH) Program monitors swimming beaches for health risks.

The BEACH Program monitors high-risk swimming beaches from Memorial Day to Labor Day.

GO



🖊 🚧 🧲 Beach Result

Beach Program > Beach Query

### Results for: LARRABEE STATE PARK, WILDCAT COVE, (WA542379)

### Weekly Averages - Beach

| Date      | Ecoli | Entero | Fecal |
|-----------|-------|--------|-------|
| 8/16/2011 |       | 135    |       |
| 8/8/2011  |       | 17     |       |
| 7/28/2011 |       | 27     |       |
| 7/27/2011 |       | < 10   |       |
| 7/21/2011 |       | 829    |       |
| 7/19/2011 |       | 687    |       |
| 7/5/2011  |       | 20     |       |
| 6/28/2011 |       | < 10   |       |
| 6/21/2011 |       | 20     |       |
| 6/16/2011 |       | 165    |       |
| 6/14/2011 |       | 168    |       |
| 6/7/2011  |       | 824    |       |
| 5/31/2011 |       | 12     |       |
| 5/23/2011 |       | 15     |       |
| 11/1/2010 |       | 680    |       |
| 9/2/2010  |       | < 10   |       |
| 8/31/2010 |       | 109    |       |
| 8/30/2010 |       | < 10   |       |
| 8/29/2010 |       | < 10   |       |
| 8/28/2010 |       | < 10   |       |
| 8/27/2010 |       | 13     |       |
| 8/26/2010 |       | 27     |       |
| 8/25/2010 |       | 43     |       |
| 8/20/2010 |       | 32     |       |
| 8/17/2010 |       | 483    |       |
| 8/10/2010 |       | 120    |       |
| 8/3/2010  |       | 361    |       |
| 7/27/2010 |       | < 10   |       |
| 7/20/2010 |       | 86     |       |
| 7/13/2010 |       | < 10   |       |
| 7/6/2010  |       | < 10   |       |
| 6/29/2010 |       | 65     |       |
| 6/22/2010 |       | < 10   |       |
| 6/15/2010 |       | 144    |       |
| 6/7/2010  |       | 3/1    |       |

## Geometric Means - Stations (Seasonal)

#### entero

| station | 2005 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---------|------|------|------|------|------|------|
| WHA034A | 12   |      |      |      |      |      |
| WHA034B | 12   |      |      |      |      |      |
| WHA034C | 12   |      |      |      |      |      |
| WHA034F |      | 25   | 28   | 22   | 29   | 61   |
| WHA034G |      | 18   | 22   | 26   | 23   | 57   |
| WHA034H |      | 10   | 17   | 15   | 25   | 18   |

# 2011 Coastal Atlas Update

Update user interface

Improved photo viewer

Add beach water quality
 & beach closure info

Add FEMA flood maps

Add shoreline public access information

Update map tools on main map

# Why is Shoreline Public Access an issue in Washington State?

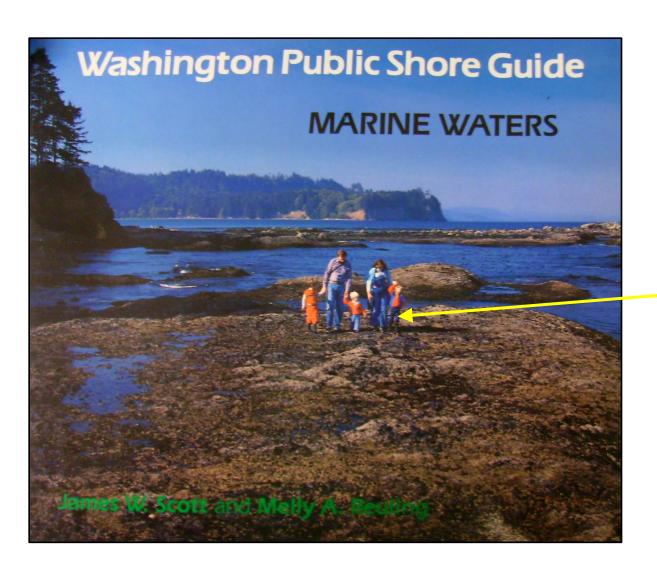
•60 to 70 percent of Washington's tidelands are in private hands. Public access is available only to about 30 percent of the state's shorelines.

• The people of Washington State want to be able to *see, touch and enjoy* the shorelines of the state. They embodied this desire by referendum in the *Shoreline Management Act of 1972*.

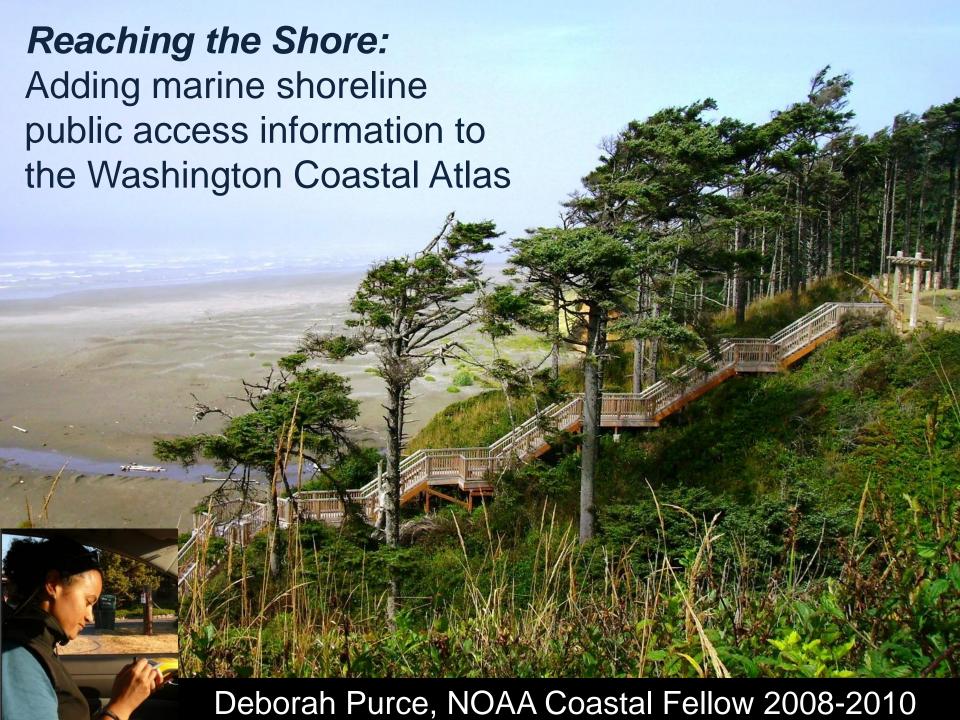
- The Shoreline Management Act has three broad policies related to how we use and develop shorelines, one of the State's most valuable and fragile natural resources.
- •The public's right to shoreline access is one of the SMA's three pillar policies.







Bell Bottoms



















Find a public beach

Enter beach or place

or go to page >









Home

Welcome to the new, improved Washington Coastal Atlas!

Tools

Learn

#### Coming soon:

- View FEMA flood maps
- Upgraded interactive map

#### **Related Information**

Washington's Coastal Zone Management Program

Shoreline Management

**BEACH Program** 

Washington's Ocean Resources

GIS data available from Ecology

Marine Water Quality Monitoring

How to report a spill

ICAN International Coastal Atlas Network Member

Home

Tools

Learn

More

Help

Home Public Beaches



Enter county, city or beach name

More search options >

Search by map >

Download public beach data on Washington State. Download public beach data >



### Take care of our shores...

Don't disturb wildlife Give marine mammals, birds, and other wildlife plenty of space.

Don't trespass Please stay within park boundaries.

Keep pets under control Use your scooper.

More >



Ecology Home | Atlas Home | Data Disclaimer | Privacy Policy

Coastal Atlas Version 5.0

Copyright © Washington State Department of Ecology 2010. All Rights Reserved.



Home Tools Learn More Help

Home > Public Beaches > More search options

### Find Public Beaches in Washington State

#### Where do you want to go?

| Enter county, city or be   | ach name                 |  |  |  |  |
|--|--------------------------|--|--|--|--|
| Find   |                          |  |  |  |  |
| Clallam  | <u></u>                  |  |  |  |  |
| Search by city   | _                        |  |  |  |  |
| Search by beach  | _                        |  |  |  |  |
| Search by region   | <u> </u>                 |  |  |  |  |
| What do you w  | ant to do?               |  |  |  |  |
| What do you w<br>Beach Walking   | Birds & Wildlife Viewing |  |  |  |  |
| Hiking   | Shellfishing             |  |  |  |  |
| Bicycling  | Crabbing                 |  |  |  |  |
| ▼ Tidepooling  | ☐ Fishing                |  |  |  |  |
| Swimming   | Horseback Riding         |  |  |  |  |
| ☐ SCUBA  | ☐ View Point             |  |  |  |  |
| Surfing  | <del></del>              |  |  |  |  |
| -  | clear selection          |  |  |  |  |
| What amenities   | do you want?             |  |  |  |  |
| Hiking trail   | ☐ Boat launch            |  |  |  |  |
| ADA Features   | Kayak launch             |  |  |  |  |
| Restrooms  | Marina Marina            |  |  |  |  |
| Drinking Water   | Dock/Pier                |  |  |  |  |
| Picnic Facilities  | Public Transportation    |  |  |  |  |
| The second secon | Washington Water Trails  |  |  |  |  |
| State Park   | Tradinington Water Trans |  |  |  |  |
| State Park Camping   | _ Tradingle Trade Trade  |  |  |  |  |



Find

Home

Tools

Learn

More

Help

#### Public **Beaches**



> Public Beaches > Search Results

#### Find Public Beaches: Search Results

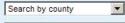


Enter county, city or beach

Find

Search:

or



Search by city

Search by beach 7

Search by region

#### Find

#### More search options >

Search for tidepooling, boat launches. wheelchair access, etc.

#### Download Data >



Your search returned ■ 4 public beaches ■ Other public beaches

| 🔍 Beach name   | Beach report |
|--|--------------|
| Quette Beach Access, Olympic National Park               | see more >   |
| Twin Rivers, Beach 422                                   | see more >   |
| Salt Park Recreation Area - Stripped Peak Cove Trailhead | see more >   |
| Salt Park Recreation Area - Lower Beach Access           | see more >   |

#### Visiting public shores

#### Check beach closures

before swimming, surfing, or kayaking.

#### Check shellfish safety

before harvesting shellfish.

#### Don't trespass

Please stay within park boundaries.

#### Pick up trash

Glass, plastic, and other trash are hazardous to wildlife and people.

#### Take only pictures

Leave marine life at the beach.

#### Don't disturb wildlife

Give marine mammals, birds, and other wildlife plenty of space.

#### Keep pets under control

Use your scooper.



#### More about public shores:

Public Trust Doctrine

Home

Tools

Learn

More

Help

#### Public **Beaches**

-

#### Public Beaches > Search Results > Twin Rivers, Beach 422

#### Twin Rivers, Beach 422

Enter county, city or beach

Find

Search:

or

Search by county Search by city -

-Search by beach

Search by region

Find

More search options >

Download Data >



#### **Beach Notes**

- · Department of Natural Resources land with beach access on the Strait of Juan de Fuca.
- . Follow the 200 meter trail through the woods and over a short bridge from the parking area to the beach.
- . Long stretch of sand and cobble beach with expansive tidelands at low tide and great views of the Strait and across to Canada.
- · Primitive road required high clearance.
- . Turn north of Hwy 112 at the school bus turnaround and follow the gravel road toward the water. Go right at the fork to the gravel parking lot.



■ Access point ■ Other access point —— Public beach

#### Get directions from:



#### More information

Clallam County Marine Recourses Committee

Clallam County Parks

Clallam County Shore Stewards - WSU Extension

Check Weather

Check Tide

Suggestions for this page? Tell us!



## **Shellfish Safety Information**

You are here: <u>DOH Home</u> » <u>EH Home</u> » <u>OSWP</u> » Biotoxin

Search | Employees

Only the **HEALTH STATUS** of beaches are shown on these maps.
For **SEASONS & LIMITS** visit <u>Washington State Department of Fish and Wildlife.</u>

#### Marine Biotoxin Closure Zones

Closed for clams, geoduck, scallops, mussels, oysters, snails and other invertebrates.

Marine Biotoxin status updated, 8/12/2011 6:53:22 AM

Public Beaches Closed

VIBRIO ADVISORY:

Cook All Shellfish

See the fact sheet on <u>Summer Precautions for</u> Recreational Harvesters

#### **Beach Information**

Name: DNR-422

Marine Biotoxin Closure Closed for clams, geoduck, scallops, mussels, oysters, snails and other invertebrates.

Owner: Department of Natural Resources

#### ADVISORY:

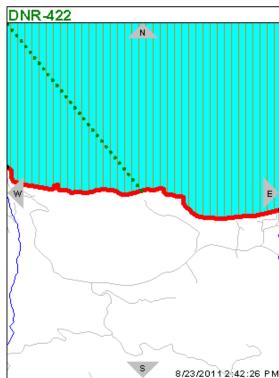
This beach has not been evaluated by the Department of Health for pollution problems. Contact your local health department for local information about pollution problems in this area.

#### WDFW Regulations/Restrictions

**DOE Shoreline Photo** 

**Tide Predictions** 

GPS: -123.94216,48.16531 TO -123.83417,48.15734



Inside Clallam County



Start Over

Emergency Closures Due to Marine Biotoxins and Vibrio -Text Version

NEW County Beach List

Recreational Program

Fact Sheets



# FISHING & SHELLFISHING

Search 🔎

Home

About WDFW

Conservation

Fishing

Hunting

Wildlife Viewing

Licensing & Permits

Living with Wildlife

Recreational Shellfishing

Public Clam & Oyster Beaches

Shellfish and Seaweed Harvest Rules

Clams

Crab Crayfish

Geoduck Clams

Mussels

Oysters

Razor Clams

Shrimp Squid

#### Statewide Harvest Rules

#### Puget Sound Clam and Oyster FAQ

Frequently asked questions about clam and oyster regulations and management.

#### Shellfish Harvester Please Fill in Your Holes

Find out why this protects both shellfish and people.

#### 2011/2012 Public Beach List - Special Rules NEW!

Public beaches with special rules because of resource needs and/or restrictions on harvest due to health concerns.



#### Recreational Shellfishing



**Buy Your License Online!** 

#### Public Clam and Oyster Beaches

< Previous | Start Search Over

#### DNR-422

230070

#### SHELLFISH TYPES & OPENINGS/CLOSURES

Clams open all year Oysters open all year

#### HARVEST PROFILE

Not much is known about clam resources on this beach.

Map to this point Google

Beach information last updated: March 22, 2010 @ 3:07pm

#### IMPORTANT NOTICE

**Boat access only.** DANGER: Boat landing is extremely dangerous. There is no public upland access to this beach.

#### HEALTH ADVISORIES

Check Dept. of Health (DOH) for health restrictions on this beach

MISC. BEACH INFORMATION

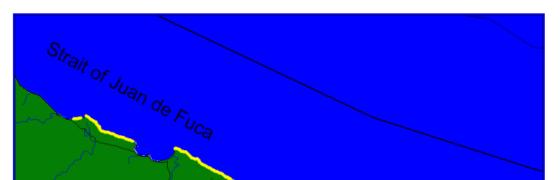
Boat Access Only

Clallam County | Region 6 Information

Marine Area 5 (SEKIU AND PILLAR POINT)
SHOW DESCRIPTION ‡

#### Clallam Bay

For individual beach information, including harvesting seasons, click on the yellow squiggles below.





## **Formal Access**

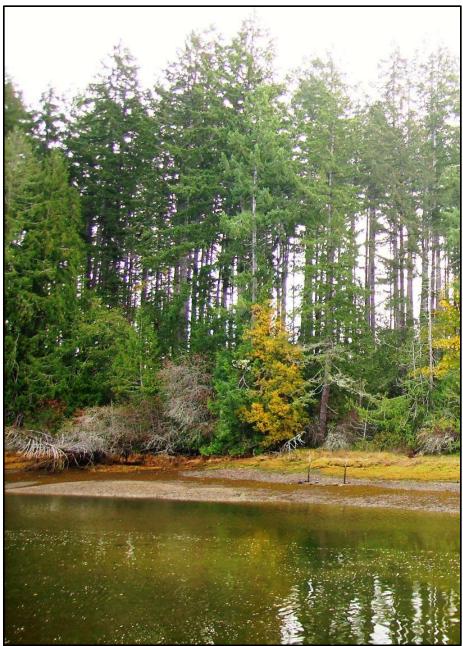








# **Informal Access**





# HOTELS AND THE PROPERTY OF THE



## **Public Road Ends**















## Public

- Docks
- Piers
- Boat launches
- Marinas





# Personal Watercraft Access Only





# How do we let people know all this is available?

Web site

Press release

Presentations

Social media



distance from the beach.

launches, docks, marinas and more.

with Ecology in developing the Beach Access online tool. A NOAA Coastal Fellow, assigned to Ecology, did much of the field work and data collection used in developing this online tool.

The Department of Health and National Oceanic and Atmospheric Administration (NOAA) partnered

It also gives you directions to legally access the beach, with photographs of signs, trailheads and other markers. This is especially helpful when the legal access area isn't well marked or is located some

The site contains a wealth of information about facilities at public beach access points, too: where they are and whether they have bathrooms, drinking water, picnic tables, barbeque pits, camping and close by recreational activities. It also links to weather and tide conditions and information on public boat

The Public Reach Access tool is only one part of Foology's Coastal Atlas a nowerful and easy-to-use









" We're not just any state, we are the great state of Washington!"

INITIATIVES

CONTACT APPOINTMENTS

GOVERNOR'S OFFICE

ABOUT CHRIS

ABOUT MIKE

| RELATED TOPICS           |
|--------------------------|
| Newsroom Home            |
| News Archive             |
| 2011 Legislative Summary |
| 2011 Bill Action         |
| 2011 Legislative Agenda  |
| 2011 Trade Mission       |
| 2010 Trade Mission       |
| Blog                     |
| Flag Lowering            |
| New Media                |
| Speeches                 |
| Photo Gallery            |
| Executive Orders         |
| Directives               |
|                          |

Proclamations

#### The Blog



#### Ted Sturdevant, Director, Department of Ecology

#### 07/05/11

With rising gas prices, families are putting more thought into their weekend plans. No one wants to drive for hours - especially with tired kids -- just to find that a favorite beach is closed for swimming or a campsite isn't what you had in mind.

Ecology has recently launched a new online Public Beach Access feature on its Coastal Atlas website that should help. Now, anyone with access to a computer can research and plan a great trip to any of Washington's public beaches, including those owned by the Washington State Parks and Recreation Commission, the Department of Natural Resources, counties and cities, or another agency.

The Coastal Atlas allows you to search for a Washington public beach by typing in an area, an address, or simply hovering a mouse over the interactive map of Washington and zooming in. It lets you see ahead of time whether the beach is closed to swimming and why.

It also gives you directions to legally access the beach, with photographs of signs, trailheads and other markers. This is especially helpful when the legal access area isn't well marked or is located some distance from the beach.

The site contains a wealth of information about facilities at public beach access points, too: where they are and whether they have bathrooms, drinking water, picnic tables, barbeque pits, camping and close by recreational activities. It also links to weather and tide conditions and information on public boat launches, docks, marinas and more.

The Department of Health and National Oceanic and Atmospheric Administration (NOAA) partnered with Earlandin developing the Bank Assessment and A NOAA Coast Ealland and to Earland

# Watch for these next...

# 2011 Coastal Atlas Update

Update user interface

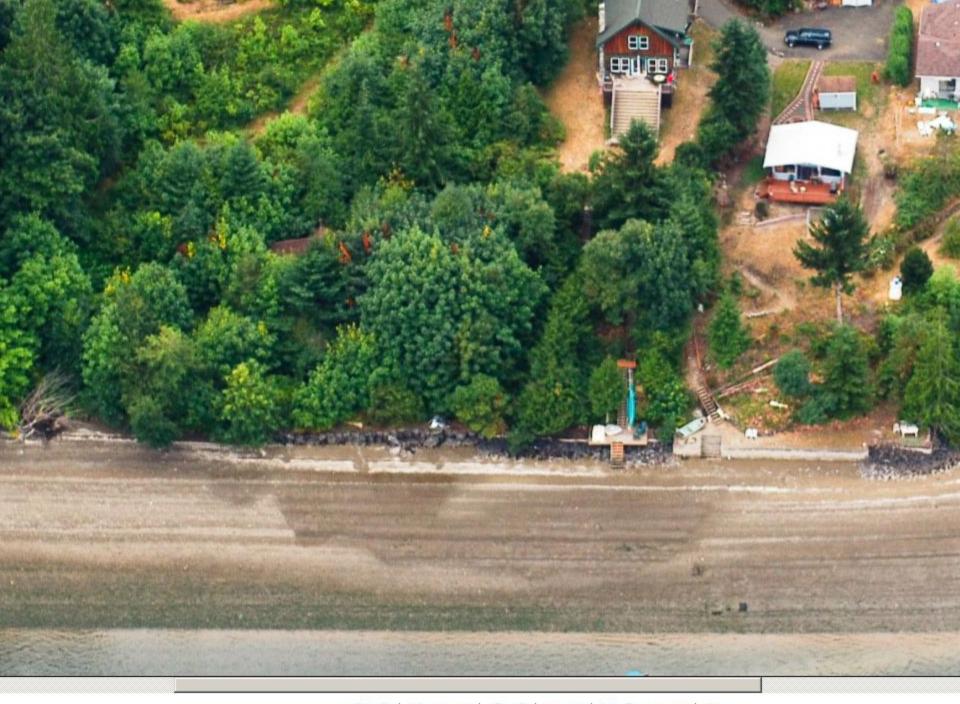
Improved photo viewer

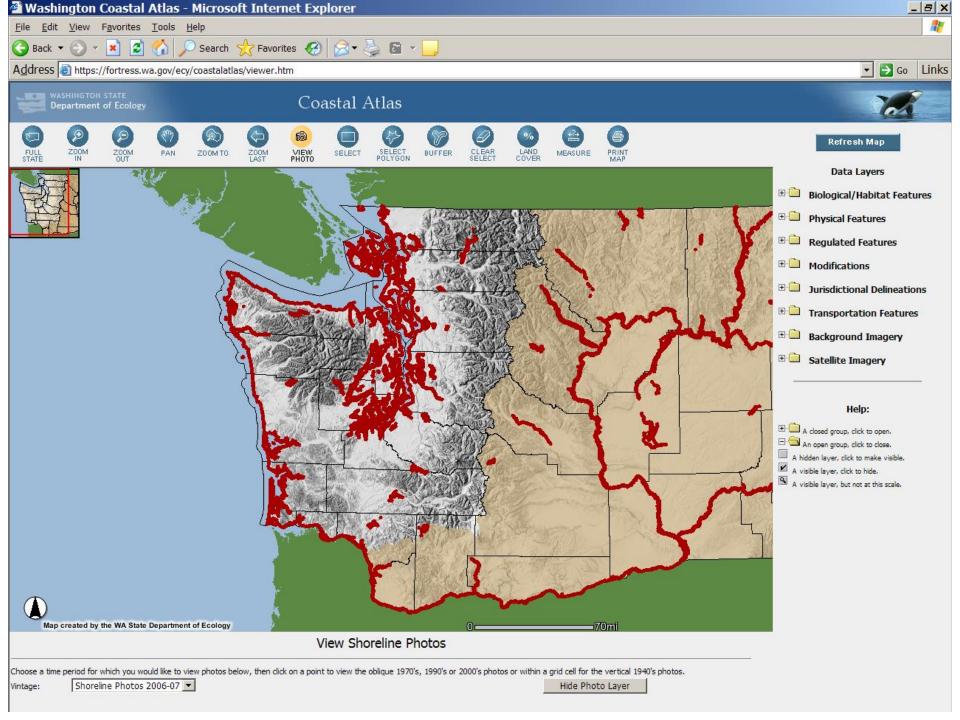
Add beach water quality
 & beach closure info

Add FEMA flood maps

Add shoreline public access information

Update map tools on main map







**@** Washington Coastal Atlas

#### Washington Coastal Atlas Photo Display - Windows Internet Explorer

https://fortress.wa.gov/ecy/coastalatlasphoto/PhotoDisplay.aspx?id=060627\_03818&vintage=2006



#### Coastal Atlas





Find on Map

Photo Reference: 060627\_03818 Date: 6/27/2006 Area: Puget Sound

#### Download links for this photo:

Low Resolution (800 x 531 pixels, 76Kb)

High Resolution (4288 x 2848 pixels, 3278Kb)

Approx. 11 seconds for 56kbps modem; 2 seconds for Cable/DSL

Approx. 7.8 minutes for 56kbps modem; 69 seconds for Cable/DSL

View photos of this area in other years: 1940s 1976-77 1992-97 2000-02











### Washington State Coastal Atlas

. Download photo

**Photos** 

Maps

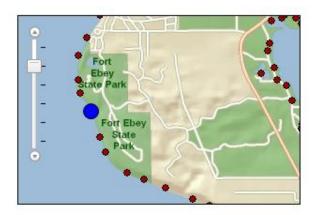
Explorer

? Help

Shoreline Photos

Home > Shoreline photos

#### **Find Shoreline Photos**





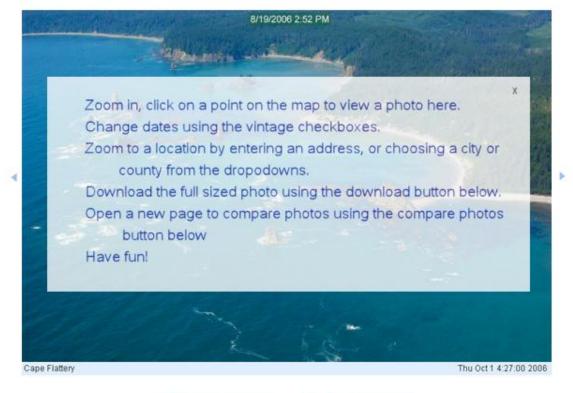
| VI | ew | ph      | of | os | fro | m: |
|----|----|---------|----|----|-----|----|
|    |    | Per 1 1 |    |    |     |    |

**▼** 2006

□ 2001

□ 1990's

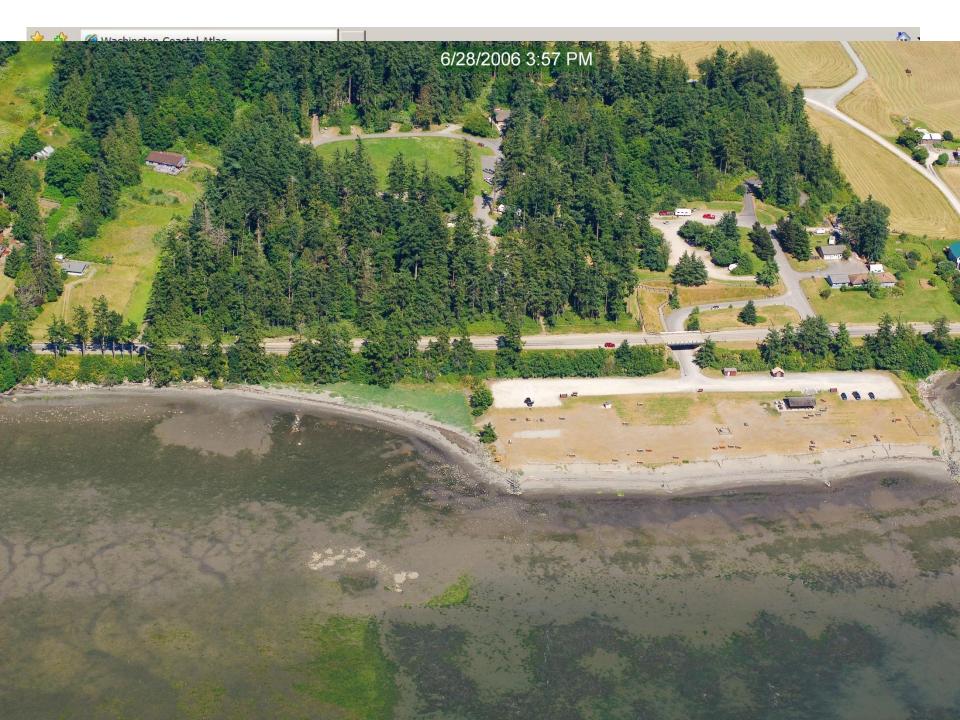
□ 1970's



Compare photos







# 2011 Coastal Atlas Update

Update user interface

Improved photo viewer

Add beach water quality
 & beach closure info

Add FEMA flood maps

Add shoreline public access information

Update map tools on main map



#### Flood Maps

#### Search by address:

Street

1514 North Mason Avenue

City
Tacoma

State ZIP Code
WA 98408

Find

Search by County

Search by City

Find

# Home > Flood Maps Find flood maps



## [Legend goes here]

FEMA Flood Insurance Rate Maps (FIRMs)

are maps of flood hazard areas.

#### See dates of studies

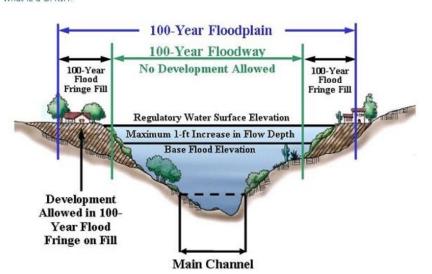
Properties located in floodplains may be required to carry flood insurance

Federal Emergency Management Agency (FEMA) Flood Maps and FIRMs

National Flood Insurance Program

Dept. of Ecology Flood Information

#### Download What is a DFRIM?



# 2011 Coastal Atlas Update

Update user interface

Improved photo viewer

Add beach water quality
 & beach closure info

Add FEMA flood maps

Add shoreline public access information

Update map tools on main map





Questions?

Kathy.Taylor@ecy.wa.gov